

Serial No. 10/813,633  
Docket No. PTGF-03090  
Reference No. HIR.099

### **REMARKS**

Applicants submit an Excess Claim Fee Payment Letter for three (3) excess total claims.

Claims 5-27 are all the claims presently pending in the application. Claims 1-4 were drawn to a non-elected invention and have been canceled. Claims 5, 7, and 14 have been amended to improve their form and to more particularly point out the invention. New claims 24-27 recite additional features of the invention.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicants specifically state that no amendment to or cancellation of any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended or canceled claim.

The title has been amended as suggested in the Office action. The Abstract, objected to in the Office action, has been amended as suggested.

An objection to claim 5 is presented in the Office action based on an ambiguity. Claim 5 has been amended to address the objection. The amendment to claim 5 suggested in the Office action respectfully has not been implemented. Instead, Applicants have amended claim 5 for clarity. New independent claim 26 incorporates the changes suggested in the Office action. Claim 5 is discussed in further detail below.

Claims 5-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,769, 798 to Mishimagi in view of U.S. Pat. No. 6,674,096 to Sommers. Claims 14-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mishimagi in view of U.S. Pat. No. 5,865,529 to Yan.

These rejections respectfully are traversed in the following discussion.

#### **I. THE CLAIMED INVENTION**

In the invention recited in claim 5, a rearview mirror apparatus for a vehicle includes a housing that has a mirror disposed on its back side, and an LED that includes a light emitting element and that plane-radiates light in a direction nearly vertical to the optical axis of the light emitting element. A light guiding member is attached to the housing such that the light

Serial No. 10/813,633  
Docket No. PTGF-03090  
Reference No. HIR.099

guiding member is exposed in an opening formed at part of the outer surface of the housing. The light guiding member houses the LED at a predetermined position. The light guiding member allows the plane-radiated light plane to be transmitted through the light guiding member and to be reflected on an inner surface of the light guiding member to be radiated in a desired direction.

In the invention recited in claim 14, a rearview mirror apparatus for a vehicle includes a housing that has a mirror disposed on its back side, and an LED that includes a light-emitting element and radiates light in an optical axis direction of the light emitting element and in a direction nearly vertical to the optical axis direction. A reflector that is disposed along the shape of the housing at part of the outer surface of the housing has at least one reflection surface which allows light radiated from the LED disposed in the reflector to be reflected in the front or side direction of the vehicle.

## II. THE PRIOR ART REJECTIONS

### A. The Mishimagi and Sommers References - Claims 5-13:

The Office action advances that Mishimagi discloses all limitations of independent claim 5, except the LED plane-radiating light in a direction nearly vertical to the optical axis of the light emitting element. Applicants agree that this limitation is not taught by Mishimagi. Applicants respectfully urge, however, that Mishimagi does not disclose all other limitations of claim 5.

More specifically, Mishimagi discloses LEDs that emit light along their optical axes toward a lamp cover. The lamp cover serves a light-guiding function. The lamp cover, however, does not house the LED's at a predetermined position. Thus, Mishimagi does not teach or suggest a rearview mirror apparatus with a light guiding member that houses at least the LED at a predetermined position. Claim 5 is patentable over Mishimagi.

Sommers does not remedy the deficiencies of Mishimagi, such as those noted above. Sommers is cited as providing the plane-radiating light emitting element admitted missing from Mishimagi. The Office action advances that it would have been obvious to incorporate such a plane-radiating element as disclosed in Sommers into the invention of Mishimagi. Applicants respectfully disagree, noting that a plane-radiating element would serve no useful

Serial No. 10/813,633  
Docket No. PTGF-03090  
Reference No. HIR.099

purpose in the lamps of Mishimagi. Indeed, a plane-radiating LED likely would reduce the efficacy of the Mishimagi device, which is designed specifically for a plurality of axially-emitting lamps.

Further, the motivation advanced in the Office action for the proposed combination of references appears to come not from the prior art, but from Applicants' disclosure, in an improper attempt to build the present invention using hindsight. More specifically, Applicants can find no motivation, in the prior art nor in the Office action, for the suggested structural change of removing the additional support portion perpendicular to the light guiding member. In addition, it appears to be largely conjecture that such a modification would "increase the efficiency of the coupling between the LED and the light guiding member." Indeed, it appears to Applicants that coupling efficiency would decrease, because most of the plane-radiated light would be radiated parallel to the primary surface of the lamp cover, as well as orthogonally to the primary viewing direction of the Mishimagi lighting device.

Moreover, incorporating a plane-radiating lamp into the side mirror arrangement taught by Mishimagi such that the lamp cover would house the plane-radiating LED, and such that the plane-radiated light would be transmitted and reflected by the light cover, would require substantial structural modifications in Mishimagi, none of which is motivated nor suggested in the prior art.

Claim 5 is patentable over Mishimagi in view of Sommers. Claims 6-13 and 24-25 depend directly or indirectly from claim 5, and are patentable over Mishimagi in view of Sommers for at least the same reasons.

**B. The Mishimagi and Yan References - Claims 14-23:**

The Office action advances that Mishimagi discloses all limitations of independent claim 14, except the LED plane-radiating light in a direction nearly vertical to the optical axis of the light emitting element. Applicants agree that this limitation is not taught by Mishimagi. Applicants respectfully urge, however, that Mishimagi does not disclose all other limitations of claim 14.

More specifically, Mishimagi discloses LEDs that emit light along their optical axes toward a lamp cover. The lamp cover serves a light-guiding function. The lamp cover,

Serial No. 10/813,633  
Docket No. PTGF-03090  
Reference No. HIR.099

however, does not have a reflection surface which allows light plane-radiated from the LED disposed in the reflector to be reflected. In addition, Mishimagi does not teach or suggest that the LED is disposed in the reflector. Thus, Mishimagi does not teach or suggest a rearview mirror apparatus with a reflector that has at least one reflection surface which allows light plane-radiated from the LED disposed in the reflector to be reflected in the front or side direction of the vehicle. Claim 14 is patentable over Mishimagi.

Yan does not remedy the deficiencies of Mishimagi, such as those noted above. Yan is cited as providing the LED that plane-radiates light. Yan does not teach or suggest, however, a reflector that has at least one reflection surface which allows light plane-radiated from the LED disposed in the reflector.

The Office action advances that it would have been obvious to incorporate such a plane-radiating element as disclosed in Yan into the invention of Mishimagi. Applicants respectfully disagree, noting, as above, that a plane-radiating element would serve no useful purpose in the apparatus of Mishimagi. Indeed, a plane-radiating LED likely would reduce the efficacy of the Mishimagi device, which is designed specifically for a plurality of axially-emitting lamps.

Further, the motivation advanced in the Office action to combine Mishimagi and Yan appears to come not from the prior art, but from Applicants' disclosure in an improper attempt to build the present invention using hindsight. More specifically, Applicants can find no motivation, in the prior art nor in the Office action, for the suggested structural change of removing the additional support portion perpendicular to the light guiding member. In addition, it appears to be largely conjecture that such a modification would "increase the efficiency of the coupling between the LED and the light guiding member." Indeed, it appears to Applicants that coupling efficiency would decrease. Significantly, most of the plane-radiated light would radiate orthogonally to the primary viewing direction of the Mishimagi lighting device, thereby reducing the intended safety advantages.

Moreover, incorporating a plane-radiating lamp into the side mirror arrangement taught by Mishimagi such that the lamp cover would house the plane-radiating LED, and such that the plane-radiated light would be transmitted and reflected by the light cover, would require substantial modifications, none of which is motivated nor suggested in the prior art.

Serial No. 10/813,633  
Docket No. PTGF-03090  
Reference No. HIR.099

Claim 14 is patentable over Mishimagi in view of Yan. Claims 15-23 depend directly or indirectly from claim 14, and are patentable over Mishimagi in view of Yan for at least the same reasons.

### III. FORMAL MATTERS AND CONCLUSION

New independent claim 26 has been included to reflect the changes to claim 5 that were suggested in the Office action. Claim 27 depends from claim 26. New claims 26-27 are submitted to be patentable over the cited prior art.

In view of the foregoing, Applicants submit that claims 5- 27, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

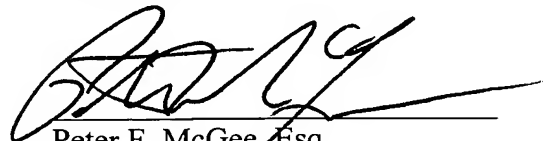
Should the application be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

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